

Application No. 10/673,504
Amendment dated August 27, 2007
Reply to Office Action of April 27, 2007

Docket No.: 0941-1683PUS1

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A gate drive device for a liquid crystal display, the open sequences for a plurality of scan lines in a panel being changed so that open sequences of the plurality of scan lines between the two adjacent gate drivers being the same, the drive device comprising:

- a display panel being divided into a plurality of division panels;
- a plurality of gate drivers being the gate drivers of the plurality of division panels;
- a plurality of control circuits for connecting the data drivers and the gate drivers of the plurality of division panels; and

- a timing control register connected to the plurality of control circuits by a plurality of control lines;

wherein the timing control register is used for controlling the open timings of the scan lines of the plurality of division panels, adjacent scan lines in the joining portions of ~~[[the]]~~ a plurality of upper-lower adjacent division panels are opened at the same time, and wherein the open timings of the adjacent scan lines in the joining portions of the plurality of upper-lower adjacent division panels are the same.

2. (Cancelled)

3. (Currently Amended) The gate drive device of claim 1, wherein the open timings of the scan lines of ~~[[the]]~~ a plurality of left-right adjacent division panels are the same.

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4. (Original) The gate drive device of claim 1, wherein the timing control register is used for temporarily storing the image starting signals of the display panel.

5. (Original) The gate drive device of claim 1, wherein the gate drivers are connected to the plurality of scan lines of the display panel for controlling.

6. (New) A gate drive device for a display, the open sequences for a plurality of scan lines in a panel being changed so that open sequences of the plurality of scan lines between the two adjacent gate drivers being the same, the drive device comprising:

a display panel comprising:

a first division panel comprising:

a first side;

a second side vertical with the first side;

a first scan line parallel with the first side; and

a second scan line parallel with the first scan line;

a second division panel comprising:

a third side parallel and adjacent with the first side;

a fourth side vertical with the third side;

a third scan line parallel and adjacent with the first scan line; and

a fourth scan line parallel with the third scan line;

a third division panel comprising:

a fifth side;

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a sixth side vertical with the fifth side and adjacent with the second side;
a fifth scan line parallel with the fifth side; and
a sixth scan line parallel with the fifth scan line; and
a fourth division panel comprising:
a seventh side parallel and adjacent with the fifth side;
a eighth side vertical with the seventh side and adjacent with the fourth side;
a seventh scan line parallel and adjacent with the fifth scan line; and
a eighth scan line parallel with the seventh scan line; and
a plurality of gate drivers being the gate drivers of the first, the second, the third, and the fourth division panels;
a plurality of control circuits for connecting the data drivers and the gate drivers of the first, the second, the third, and the fourth division panels; and
a timing control register connected to the plurality of control circuits by a plurality of control lines;
wherein the timing control register is used for controlling the open timings of the first, the second, the third, the fourth, the fifth, the sixth, the seventh, and the eighth scan lines, at a first period, the first, the third, the fifth, and the seventh scan lines are opened at the same time, and at a second period following the first period, the second, the fourth, the sixth, and the eighth scan lines are opened at the same time.